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## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Art Unit

1761

Examiner

: H. Pratt

**Applicants** 

John F. Stevens et al.

Appln. No.

: 09/960,191

Filing Date

September 21, 2001

Confirmation No.

4580

For

RETICULATION-FREE WATER-DISPERSIBLE COATING

COMPOSITION FOR FOOD SUBSTRATES

## DECLARATION OF JOHN F. STEVENS

I, John F. Stevens, do hereby declare as follows:

- 1. I am the Vice President for Research and Development for Advanced Food Technologies, assignee of the present patent application. I graduated from Cornell University with a Food Science Degree in 1970. I have had over 30 years experience in the food science industry. I have had extensive experience specifically in the food coatings area for 14 years, since 1989.
- 2. From 1989 to 1991, I was the Research and Development Manager for Universal Foods Corporation, where I directed coated french fry developments which resulted in 60 million dollars in additional annual sales for the company. I developed the first clear coat french fry, now having estimated markets sales of over 1 billion pounds per year.
  - 3. From 1991 to 1994, I conducted food coatings research for McCain Foods, Inc.
- 4. From 1994-1996, I was the Research Manager for Miles Willard Company, directing all frozen and non-snack dehydrated potato development, including the development of a patented clear coat french fry product.
- 5. From 1996-1999, I was the Director of Northwest Region Technical Services for Newly Weds Foods, Inc. I established, staffed and directed all formula, process, specification, and commercialization of seasoned and clear coat french fry batters for all french fry processors and chain accounts throughout the United States. I developed and

commercialized a signature clear coat french fry for a major processor and for a major national chain account.

- 6. From 1999 to date, I have served as the Vice President of Research and Development for Advanced Food Technologies. A copy of my resume is attached hereto as Exhibit 1.
- 7. I am one of the named inventors of U.S. Patent Application Serial No. 09/960,191.
- 8. I have reviewed the Office Action mailed April 13, 2004, in U.S. Patent Application Serial No. 09/960,191 and the primary references cited therein, U.S. Patent Nos. 5,626,893 and 6,159,521. In doing so, I noticed some slight calculation errors in the tables on pages 9 and 10 of the originally filed application (paragraphs 0029-0037 of U.S. Patent Application Publication No. US 2002/0058099 A1, which is the corresponding published application in this case). These tables are based upon Tables 1-3 on pages 6-8 of the original application and the data on page 13 of the originally filed application. The data on page 13 and the information in Tables 1-3 on pages 6-8 were and are correct (the only exception being that there is a mathematical addition error in the data on page 13 under the "Total for 80 Mesh Size Rating Rice," which read 199%, but, when totaled, the values indicate this should be 100.01%).
- 9. Attached hereto as Exhibit 2 are the revised calculations for the tables appearing on pages 9 and 10 of the originally filed application and the new tables. All of these calculations are based upon information and data present in the originally filed application as discussed above.
- 10. Prior to the unexpected discovery of the present invention, the food coating industry had a long-standing problem that coatings containing rice flour resulted in reticulation on the finished food product. Previously, the industry widely believed that processing conditions caused this undesirable result. To solve this problem, the inventors in this case first tested rice starch to see if it would exhibit similar desired characteristics, such as crispness enhancement, without the undesired reticulation. This was successful. Thereafter, the inventors extrapolated that perhaps the size of the rice particles of the rice flour

(traditionally 80 mesh commercial size versus rice starch – about 200 US mesh) caused the reticulation. Accordingly, rice flour with a commercial size of smaller than 80 mesh was tested. Quite unexpectedly, the smaller sized rice flour allowed for increased incorporation of the rice flour into the coating composition without substantial reticulation.

All statements made herein of my own knowledge are true and all statements made on information and belief are believed to be true, and further, these statements are made with the knowledge that willful false statements and the like are punishable by fine or imprisonment, or both, under 18 USC §1001, and that such willful false statements may jeopardize the validity of this application or any patent issued thereon.

October 12, 2004 Date

John F. Stevens

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#### **OBJECTIVE**

Management position in food-related product development

#### PROFESSIONAL SUMMARY

Director with 28 years of product management experience. Demonstrated ability to structure innovative solutions to complex problems that allow for increased profits. Proven ability to develop quality teams that motivate others to their peak performance and reduce execution time.

#### CAREER HISTORY

### **NEWLY WEDS FOODS, INC.**

1996 - 1999

Idaho Falls, Idaho

#### DIRECTOR, NORTHWEST REGION TECHNICAL SERVICES

- Established, staffed, and directed all formula, process, specification, and commercialization of seasoned and clear coat french fry batters for all french fry processors and chain accounts throughout the United States.
- Worked directly with all french fry processors to define, develop, and implement process improvements, and introduce new and cost reduced products to their lines.
- Salvaged failing business at key customer by demonstrating technical expertise with flours, starches, seasonings, processing capability, and implementing process savings in excess of \$1,000,000 per year.
- Developed and commercialized a signature clear coat french fry for a major processor and for a major national chain account.
- Developed patent-pending process for maintaining light colored fried potato products throughout the year.

#### MILES WILLARD COMPANY

1994 - 1996

Idaho Falls, Idaho

#### RESEARCH MANAGER

- Directed all frozen and non-snack dehydrated potato development, creating 8 new product opportunities and bringing on board two new clients on a royalty-paying basis.
- Developed patented clear coat french fry product and patent-pending processes for reduced fat coated fries, and for improved chopped & formed product.

### McCAIN FOODS, INC.

1991 - 1994

Frozen Foods Division - Othello Washington

### DIRECTOR, TECHNICAL SERVICES

- Directed all research, quality assurance, nutrition, specification, labeling, and internal sensory for the USA multi-plant operation.
- Commercialized signature french fry line, resulting in \$30,000,000 sales.
- Commercialized first flavored marinade french fry line valued at \$10,000,000, obtaining patent.

### UNIVERSAL FOODS CORPORATION

1989 - 1991

Frozen Foods Division - Twin Falls, Idaho

## R&D MANAGER, NEW PRODUCTS

- Directed coated french fry developments and internal sensory resulting in \$60,000,000 additional sales.
- Developed first clear coat french fry now having estimated market sales of over 1 billion pounds per year.
- Instituted cost reduction programs resulting in \$4,000,000 savings per year.

### STEVENS LABORATORIES, INC.

1988 - 1989

Rochester, New York

#### GENERAL MANAGER

• Took over family business of food & wastewater analyses from father who was retiring. Computerized and streamlined operations.

#### THE PILLSBURY COMPANY

1985 - 1988

Minneapolis, Minnesota

- Directed all dehydrated potato maintenance valued at \$150,000,000.
- Created concept and development of marketed microwave potato specialty line valued at \$20,000,000.
- Headed team for the development of 12 marketed food service bakery toppings valued at \$8,000,000.
- Developed and implemented cost reduction programs amounting to more than \$1,000,000, achieving an award for outstanding cost reduction contribution.
- Developed a sulfite program that established benchmarks for the FDA and resulted in identifying the ability to significantly reduce use levels.

#### THE R. T. FRENCH COMPANY

1970 - 1985

(Potato Division acquired by The Pillsbury Company in 1985) Rochester, New York / Idaho Falls, Idaho

#### MANAGER, FOOD SERVICE BUSINESS DEVELOPMENT

1984 - 1985

- Identified new business areas resulting in a \$10,000,000 development strategy.
- Built the food service laboratory and directed programs requiring identifying and implementing new package design / copy, resulting in increased product marketability.
- Developed and launched a new concept of potato in a pouch resulting in \$15,000,000 sales.
- Worked directly with distributorships, national account managers, brokers, and ad / creative design houses.

### MANAGER, PRODUCT RESEARCH & DEVELOPMENT

1978 - 1984

- Built the research facility and directed new product and sensory programs resulting in \$32,000,000 additional retail sales per year and \$40,000,000 food service sales per year.
- Constructed and directed cost reduction programs resulting in \$6,000,000 savings.
- Oversaw development of specifications, nutrition labeling, and package design.

## SUPERVISOR, TECHNICAL SERVICES SENIOR SCIENTIST FOOD SCIENTIST

1976 - 1978

1974 - 1976

1970 - 1974

• Responsible for the development of the Automash Potato Dispenser system, and sales personnel training resulting in \$8,000,000 sales per year. Developed specialty blend mashed products and food service casseroles for major chain accounts resulting in \$50,000,000 sales. Developed wet and dry system blends such as mustard, ketchup, spaghetti, barbecue, and specialty sauces.

#### **EDUCATION**

Cornell University, Ithaca, New York

**Bachelor of Science Degree, June 1970** 

The College of Food and Dairy Science

(Food and Dairy Science)

REFERENCES FURNISHED UPON REQUEST

## **EXHIBIT 2**

The following figures are taken directly from the data on page 13 of the originally filed application, which corresponds to paragraph [0046] of Published Patent Application No. US 2002/0058099 A1.

# A) PERCENT FINER THAN 80 MESH SCREEN SIZE

120 Mesh Commercial Size Rating Rice	80 Mesh Commercial Size Rating Rice Flour
Flour	
% above #100 Mesh = 23.4%	38.61%
% above #120 Mesh = 23.37%	15.72%
% above #150 Mesh = 0.59%	0.03%
% above #170 Mesh = 5.66%	0.18%
% above #200 Mesh = 3.79%	0.74%
% above #270 Mesh = 2.63%	0.66%
+ Pan = 0.47%	0.08%
Total finer than 80 Mesh = 59.91%	Total finer than 80 Mesh = 56.02%

# B) PERCENT FINER THAN 100 MESH SCREEN SIZE

120 Mesh Commercial Size Rating Rice Flour	80 Mesh Commercial Size Rating Rice Flour
% above #120 Mesh = 23.37%	15.72%
% above #150 Mesh = 0.59%	0.03%
% above #170 Mesh = 5.66%	0.18%
% above #200 Mesh = 3.79%	0.74%
% above #270 Mesh = 2.63%	0.66%
+ Pan = 0.47%	0.08%
Total finer than 100 Mesh = 36.51%	Total finer than 100 Mesh = 17.41%

# C) PERCENT FINER THAN 120 MESH SCREEN SIZE

120 Mesh Commercial Size Rating Rice Flour	80 Mesh Commercial Size Rating Rice Flour
% above #150 Mesh = 0.59%	0.03%
% above #170 Mesh = 5.66%	0.18%
% above #200 Mesh = 3.79%	0.74%
% above #270 Mesh = 2.63%	0.66%
% in Pan = 0.47%	0.08%
Total finer than $120 \text{ Mesh} = 13.14\%$	Total finer than 120 Mesh = 1.69%

# D) PERCENT FINER THAN 80 MESH SCREEN SIZE

	100 Mesh Commercial Size Rating Rice Flour
% above #100 Mesh	(23.4 + 38.61)/2 = 31.0%
% above #120 Mesh	(23.37 + 15.72)/2 = 19.55%
% above #150 Mesh	(0.59 + 0.03)/2 = 0.31%
% above #170 Mesh	(5.66 + 0.18)/2 = 2.92%
% above #200 Mesh	(3.79 + 0.74)/2 = 2.27%
% above #270 Mesh	(2.63 + 0.66)/2 = 1.65%
% in Pan	(0.47 + 0.08)/2 = 0.275%
TOTAL	57.975% → rounded up to 58%

# E) PERCENT FINER THAN 100 MESH SCREEN SIZE

	100 Mesh Commercial Size Rating Rice Flour
% above #120 Mesh	(23.37 + 15.72)/2 = 19.55%
% above #150 Mesh	(0.59 + 0.03)/2 = 0.31%
% above #170 Mesh	(5.66 + 0.18)/2 = 2.92%
% above #200 Mesh	(3.79 + 0.74)/2 = 2.27%
% above #270 Mesh	(2.63 + 0.66)/2 = 1.65%
% in Pan	(0.47 + 0.08)/2 = 0.275%
TOTAL	26.975 → rounded to 27%

# F) PERCENT FINER THAN 120 MESH SCREEN SIZE

	100 Mesh Commercial Size Rating Rice Flour
% above #150 Mesh	(0.59 + 0.03)/2 = 0.31%
% above #170 Mesh	(5.66 + 0.18)/2 = 2.92%
% above #200 Mesh	(3.79 + 0.74)/2 = 2.27%
% above #270 Mesh	(2.63 + 0.66)/2 = 1.65%
% in Pan	(0.47 + 0.08)/2 = 0.275%
TOTAL	7.425%

The following calculations correspond to paragraph [0029] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 1 experiments of the originally filed application.

<u>Control 1</u> -% of particles smaller than #80 USS mesh size = 5.6%.

Calculation:

- a dry mix containing 10% #80 US mesh screen (see Table 1 on p. 6-7) would contain 10% of 56% (col. 2 of Table A on p.1 of this Exhibit) or 5.6% of the 10% rice would be finer than 80 US mesh 56% x .10 = 5.6% in a total of 10% rice flour. This is identical to values shown in the application.

<u>Control 2</u> - % of particles smaller than #80 USS mesh size = 10.1%

Calculation:

56% (col. 2 of Table A on p. 1 of this Exhibit) x . 18 = 10.08% rounded up to 10.1%. This is identical to the original value shown in the application.

Mixture 3 - % of particles smaller than #80 USS mesh size = 9.28%

Calculation:

(58% smaller than #80 US mesh (see Table D on p. 2 of this Exhibit) x 16% rice in dry mix) = 58 x .16 = 9.28%. This is identical to the original value shown in the application.

Mixture 4 - % of particles smaller than #80 US mesh size = 10.44%.

Calculation:

(58% (see Table D on p. 2 of this Exhibit) x .18 = 10.44%)

Mixture 5 - % of particles smaller than #80 US mesh size = 12.1%.

Calculation:

58% x .14 + 100% of 4% <u>Rice Starch</u> = 58 (see Table D on p. 2 of this Exhibit) x .14 + 4 = 8.12% + 4% = 12.12%.

Mixture 6 - % of particles smaller than #80 US mesh size = 14.5%.

Calculation:

58% (see Table D on p. 2 of this Exhibit) x .25 = 14.5%. This is identical to the original value shown in the application.

Mixture 7 - % of particles smaller than #80 US mesh size = 17.4%.

Calculation:

58% (see Table D on p. 2 of this Exhibit) x .30 = 17.4%. This is identical to the original value shown in the application.

The following calculations correspond to paragraph [0030] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 2 experiments of the originally filed application.

<u>Control 1</u> - % of particles smaller than #80 USS mesh size = 10.3%.

Calculation:

18.33% of an 80 US mesh rice =

(.1833) (56 percent rice smaller than 80 US mesh – see Table C) =

(.1833) (56) =  $10.26\% = \underline{10.3\%}$ . This is identical to the original value shown in the application.

Example 1 - % of particles smaller than #80 USS mesh size = 10.6%.

Calculation:

Total rice component of 18.33% consisting of 5% 80 US mesh rice and 95% of smaller than 100 US mesh size, 12.22% of commercial size rated 80 US mesh rice flour, which, as shown in Table A, has 56% rice particles smaller than 80 US mesh.

(18.33% rice) (5% of 80 US mesh rice) (56% smaller than 80 US mesh) = (.1833) (.05) (56) = 0.5%.

+

(18.33% rice) (95% of 100 US mesh or smaller rice) (58% minimum smaller than 80 US mesh) =

$$(.1833)(.95)(58) = 10.1\%$$
.

**Total** = 0.5% + 10.1% = 10.6% - This is identical to the original value shown in the application.

Example 2 - % of particles smaller than #80 USS mesh size = 10.1%.

Calculation:

$$(.1222)(.95)(58\%) = 6.7\%$$

12.22% of 95% of 100 US mesh or smaller rice, which, as shown in Table D, has 58% rice particles smaller than 80 US mesh.

6.11% rice flour commercial size rated 80 US mesh rice flour, which, as shown in Table A, has 56% rice particles smaller than 80 US mesh.

$$(.0611)(56\%) = 3.4\%$$

**Total** = 6.7% + 3.4% = 10.1%. This is identical to the original value shown in the application.

Example 3 - % of particles smaller than #80 USS mesh size = 10.2%.

Calculation:

$$(.0611)(.95)(58\%) = 3.4\%$$

6.11% of 95% of 100 US mesh or smaller rice flour, which, as shown in Table D, has 58% rice particles smaller than 80 US mesh., 58% smaller than 80 US mesh (see Table D).

$$(.1222)(56\%) = 6.8\%$$

**Total** = 3.4% + 6.8% = 10.2%. This is identical to the original value shown in the application.

The following calculations correspond to paragraph [0031] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 3 experiments of the originally filed application.

<u>Control 1</u> - % of particles smaller than #80 USS mesh size = 10.1%

Calculation:

(.1800) (56%) = 10.08% rounded up to 10.1%. This is identical to the original value shown in the application.

Example 1 - % of particles smaller than #80 USS mesh size = 12.2%

Calculations:

$$(.1400) (58\%) + (0.04) (100\%) = 12.1\%$$

8.12 + 4 = 12.12, which rounded down is 12.1%. In my opinion, this difference of one hundredth is a rounding difference to the original value shown in the application.

Example 2 - % of particles smaller than #80 USS mesh size = 14.4%.

Calculation:

$$(0.09) (58) = 5.22\%$$
  
+  $5.22\% + 9\% = 14.2\%$ 

(0.09) (100%) = 9% In my opinion, this difference is a rounding different to the original value shown in the application.

Example 3 - % of particles smaller than #80 USS mesh size = 18%

Calculations:

(.1800) (100%) = 18%. This is identical to the original value shown in the application.

The following calculations correspond to paragraph [0032] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 1 experiments of the originally filed application.

<u>Control 1</u> -% of particles smaller than #100 USS mesh size = 1.74%.

Calculation:

- a dry mix containing 10% #80 USS mesh screen (see Table 1 on p. 6-7) would contain 10% of 17.41% (col. 2 of Table B on p.1 of this Exhibit) or 1.74% of the 10% rice would be finer than 80 US mesh 17.41% x .10 = 1.741% in a total of 10% rice flour.

This value is different than the one originally shown in the application. I believe there was an error in totaling the percent of rice particles finer than 100 US mesh in 80 US mesh rice flour.

<u>Control 2</u> - % of particles smaller than #100 USS mesh size = 3.13%

Calculation:

17.41% (col. 2 of Table B on p. 1 of this Exhibit) x .18 = 3.13%.

This value is different than the one originally shown in the application. I believe there was an error in totaling the percent of rice particles finer than 100 US mesh in 80 US mesh rice flour.

Mixture 3 - % of particles smaller than #100 USS mesh size = 4.32%

Calculation:

(27% smaller than #100 US mesh (see Table E on p. 2 of this Exhibit) x 16% rice in dry mix) = 27 x .16 = 4.32%. This is identical to the original value shown in the application.

Mixture 4 - % of particles smaller than #100 USS mesh size = 4.86%.

Calculation:

(27% (see Table E on p. 2 of this Exhibit) x .18 = 4.86%) This identical to the original value shown in the application.

Mixture 5 - % of particles smaller than #100 USS mesh size = 7.78%.

Calculation:

 $27\% \times .14 + 100\% \text{ of } 4\% \text{ Rice Starch} =$ 

27 (see Table E on p. 2 of this Exhibit)  $x \cdot 14 + 4 =$ 

3.78% + 4% = 7.78%. This is identical to the original value shown in the application.

Mixture 6 - % of particles smaller than #100 USS mesh size = 6.75%.

Calculation:

27% (see Table E on p. 2 of this Exhibit) x .25 = 6.75%. This is identical to the original value shown in the application.

Mixture 7 - % of particles smaller than #100 USS mesh size = 8.1%.

Calculation:

27% (see Table E on p. 2 of this Exhibit) x .30 = 8.1%. This is identical to the original value shown in the application.

The following calculations correspond to paragraph [0033] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 2 experiments of the originally filed application.

<u>Control 1</u> - % of particles smaller than #100 USS mesh size = 3.19%.

Calculation:

18.33% of an 80 US mesh rice =

(.1833) (17.41 percent rice smaller than 100 US mesh in commercially rated 80 US mesh rice flour – see Table E) =

$$(.1833)(17.41) = 3.19\%$$
.

This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 100 US mesh commercial rice flour content being used.

Example 1 - % of particles smaller than #100 USS mesh size = 4.86%.

Calculation:

Total rice component of 18.33% consisting of 5% 80 US mesh rice and 95% of smaller than 100 US mesh size, which, as shown in Table B, has 17.41% rice particles smaller than 100 US mesh.

$$(18.33\% \text{ rice})$$
 (5% of 80 US mesh rice) (17.41% smaller than 100 US mesh) = (.1833) (.05) (17.41) =  $0.16\%$ .

(18.33% rice) (95% of 100 US mesh or smaller rice) ( $\underline{27\%}$  minimum smaller than 100 US mesh (see Table E)) =

$$(.1833)(.95)(27) = 4.70\%$$
.

**Total** = 0.16% + 4.70% = 4.86% - This is very similar to 4.85% shown in the original chart. In my opinion, this difference of one hundredth is a rounding difference to the original value shown in the application.

Example 2 - % of particles smaller than #100 USS mesh size = 4.19%.

Calculation:

12.22% of 95% of 100 US mesh or smaller rice, which, as shown in Table E, has 27% rice particles smaller than 100 US mesh.

$$(.1222)(.95)(27\%) = 3.13\%$$

6.11% rice flour commercial size rated 80 US mesh rice flour, which, as shown in Table B, has 17.41% rice particles smaller than 100 US mesh.

$$(.0611)(17.41\%) = 1.06\%$$

**Total** = 3.13% + 1.06% = 4.19%. This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 100 US mesh commercial rice flour content being used.

Example 3 - % of particles smaller than #100 US mesh size = 3.7%.

Calculation:

(.0611)(.95)(27%) = 1.57%

6.11% of 95% of 100 US mesh or smaller rice flour, which, as shown in Table E, has 27% rice particles smaller than 100 US mesh, 58% smaller than 80 US mesh (see Table E).

(.1222)(17.41%) = 2.13%

**Total** = 1.57% + 2.13% = 3.7%. This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 100 US mesh commercial rice flour content being used.

The following calculations correspond to paragraph [0034] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 3 experiments of the originally filed application.

Control 1 - % of particles smaller than #100 USS mesh size = 3.13% Calculation:

(.1800) (17.41%) = 3.13%. This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 100 US mesh commercial rice flour content being used.

Example 1 - % of particles smaller than #100 USS mesh size = 7.78%

Calculations:

$$(.1400)(27\%) + (0.04)(100\%) = 7.78\%$$

3.78 + 4 = 7.78. This is identical to the original value shown in the application.

Example 2 - % of particles smaller than #100 USS mesh size = 11.43%.

Calculations:

$$(0.09) (27) = 2.43\%$$
  
+  $2.43\% + 9\% = 11.43\%$   
 $(0.09) (100\%) = 9\%$ 

This value is identical to the original value shown in the application.

Example 3 - % of particles smaller than #80 USS mesh size = 18%

Calculation:

(.1800) (100%) = 18%. This is identical to the original value shown in the application.

The following calculations correspond to paragraph [0035] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 1 experiments of the originally filed application.

- <u>Control 1</u> -% of particles smaller than #120 USS mesh size = 0.169%, rounded up to 0.17%. Calculation:
- a dry mix containing 10% #80 USS mesh screen (see Table 1 on p. 6-7) would contain 10% of 1.69% (col. 2 of Table C on p.1 of this Exhibit) or 0.169% of the 10% rice would be finer than 120 US mesh  $1.69\% \times .10 = 0.169\%$  in a total of 10% rice flour. This is similar to values shown in the application, but the significant figures were inadvertently not shown.
- Control 2 % of particles smaller than #120 USS mesh size = 0.30%Calculation:

1.69% (col. 2 of Table C on p. 1 of this Exhibit) x .18 = 0.30%. This value is different than the one originally shown in the application. I believe there was an error in totaling the percent of rice particles finer than 120 US mesh in 80 mesh rice flour.

Mixture 3 - % of particles smaller than #120 USS mesh size = 1.2%Calculation:

(7.425% smaller than #120 US mesh (see Table F on p. 2 of this Exhibit) x 16% rice in dry mix) = 7.425 x .16 = 1.188%, which rounds up to 1.2%. This is identical to the original value shown in the application.

Mixture 4 - % of particles smaller than #120 USS mesh size = 1.34%.

Calculation:

(7.425% (see Table F on p. 2 of this Exhibit) x .18 = 1.34%. This value is within a hundredth of the value shown in the original application. In my opinion, this difference is likely due to rounding.

Mixture 5 - % of particles smaller than #120 USS mesh size = 5.04%.

Calculation:

 $7.425\% \times .14 + 100\% \text{ of } 4\% \text{ Rice Starch} =$ 

7.425 (see Table F on p. 2 of this Exhibit)  $x \cdot 14 + 4 =$ 

1.04% + 4% = 5.04%. This value is within a hundredth of the value shown in the original application. In my opinion, this difference is likely due to rounding.

Mixture 6 - % of particles smaller than #120 USS mesh size = 1.86%.

Calculation:

7.425% (see Table F on p. 2 of this Exhibit) x .25 = 1.86%, which rounds up to 1.9%. This is identical to the original value shown in the application.

Mixture 7 - % of particles smaller than #120 USS mesh size = 2.23%. Calculation:

7.425% (see Table F on p. 2 of this Exhibit) x .30 = 2.23%. This value is within a hundredth of the value shown in the original application. In my opinion, this difference is likely due to rounding.

The following calculations correspond to paragraph [0036] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 2 experiments of the originally filed application.

Control 1 - % of particles smaller than #120 USS mesh size = 0.31%.

Calculation:

18.33% of an 80 US mesh rice =

(.1833) (1.69 percent rice smaller than 120 US mesh – see Table C) =

(.1833) (1.69) = 0.31%. This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 120 US mesh commercial rice flour content being used.

Example 1 - % of particles smaller than #120 USS mesh size = 1.31%.

Calculation:

Total rice component of 18.33% consisting of 5% 80 US mesh rice and 95% of smaller than 100 US mesh size, which, as shown in Table C, has 1.69% rice particles smaller than 120 mesh.

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(18.33\% \text{ rice}) (5\% \text{ of } 80 \text{ US mesh rice}) (1.69\% \text{ smaller than } 80 \text{ US mesh}) = (.1833) (.05) (1.69) = <math>0.015\%.
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(18.33% rice) (95% of 100 US mesh or smaller rice) (7.425% minimum smaller than 80 US mesh) =

$$(.1833)(.95)(7.425) = 1.29\%$$

 $Total = 0.015\% + 1.29\% = \underline{1.31\%}$  - This value is different than that shown in the original application. I believe this error was due to a different value than the calculated value for the 120 US mesh commercial rice flour content being used.

Example 2 - % of particles smaller than #120 USS mesh size = 0.96%.

Calculation:

$$(.1222)(.95)(7.425\%) = 0.86\%$$

12.22% of 95% of 100 US mesh or smaller rice, which, as shown in Table F, has 7.425% rice particles smaller than 120 US mesh.

6.11% rice flour commercial size rated 80 US mesh rice flour, which, as shown in Table C, has 1.69% rice particles smaller than 120 US mesh.

$$(.0611)(1.69\%) = 0.10\%$$

 $Total = 0.86 + 0.10 = \underline{0.96\%}$ . This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 120 US mesh commercial rice flour content being used.

Example 3 - % of particles smaller than #120 USS mesh size = 0.64%.

Calculation:

(.0611)(.95)(7.425%) = 0.43%

6.11% of 95% of 100 US mesh or smaller rice flour, which, as shown in Table F, has 7.425% rice particles smaller than 120 US mesh.

(.1222)(1.69%) = 0.21%

**Total** = 0.43% + 0.21% = 0.64%. This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 120 US mesh commercial rice flour content being used.

The following calculations correspond to paragraph [0037] of Published Patent Application No. US 2002/0058099 A1. The calculations use the data from page 13 of the originally filed application (see p. 1-2 of this Exhibit) and the Table 3 experiments of the originally filed application.

Control 1 - % of particles smaller than #120 USS mesh size = 0.30% Calculation:

(.1800) (1.69%) = 0.30%. This value is different than the value originally shown in the application. I believe this error was due to a different value than the calculated value for the 120 US mesh commercial rice flour content being used.

Example 1 - % of particles smaller than #120 USS mesh size = 5.04%

Calculations:

$$(.1400) (7.425\%) + (0.04) (100\%) = 5.04\%$$

1.04 + 4 = 5.04. This value is within a hundredth of the value shown in the original application. In my opinion, this difference is likely due to rounding.

Example 2 - % of particles smaller than #120 USS mesh size = 9.67%.

Calculation:

$$(0.09) (7.425) = 0.67\%$$
  
+  $0.67\% + 9\% = 9.67\%$   
 $(0.09) (100\%) = 9\%$ 

This is identical to the original value shown in the application.

Example 3 - % of particles smaller than #120 USS mesh size = 18%

Calculation:

(.1800) (100%) = 18%. This is identical to the original value shown in the application.